

General Physics

EFFECTS OF INHERITANCE AND KNOWLEDGE DISTRIBUTION IN MODIFIED IMAGE SCORING MODEL

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The evolution of modern cooperative trends now seen in human society is not easily explained thus far. It has been shown through extensive computational studies and theoretical analysis that cooperation can be established due to the emergence of indirect reciprocity. In previous studies it was also found that a high information flow rate among different members in the society stimulates cooperation in a society. In this study we found that the decrease of cooperation costs will make a society more cooperative. Also, by including the inheritance of wealth in this study, cooperation is stimulated more easily, even when the exchange rate is comparatively low. The distribution of knowledge according to wealth is also studied. We find that for that model, cooperation is slightly less likely to occur if the exchange rate is low.